

Heartland Research Group
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Ms. Tebockhorst:

Thank you for your email of July 5th. I appreciate all of your efforts. I will call your office on Monday morning to discuss how we can proceed.

I am working closely with several people who are potential supporters of this research. Next week my colleague, Jeff Green, will analyze the iron oxides (FeO₃) found in 6 samples from the site. We propose to use the percentage of iron oxides as surrogate indicators for color differences in the soil samples. I am also working with Dr. Kevin Price, Professor Emeritus at the University of Kansas. He is helping me to establish the protocols for taking the samples and for preparing the statistical analysis.

I have already contacted one person who seems interested in paying a professional engineering company to make 12 x 12' x 2" soil profiles from the core drilling of 12 pre-determined spots within the grids of a 170' x 130' rectangle. You will find on the next page in Table 1 the grids and cells which would give the template for the core drilling. We have not finalized the 12 drilling spots. These spots will depend on the limited soil tests of 6 samples and on the rigor of methods for statistical sampling.

I am also attaching the same photos which I sent to you on June 24th. You may present Table 1 and the photos to the engineering companies so that they can prepare their bids for getting the soil profiles. These bids will be an important part in obtaining the necessary funding.

I look forward to our conversation.

Sincerely,

John Lefgren, PhD
Economic Historian

Attachments

Table 1

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170 feet x 130 feet Area Containing 10 feet x 10 feet Cells
 For Selection of Sand and Soil Samples in Lee County, Iowa

Red Cells - Proposed Locations of
 Lighter-Colored Sands Used by Ancient People
 for Floor and Foundation of Building - 90 feet x 130 feet

	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
10																	
20																	
30			A												B		
40																	
50																	
60																	
70																	
80																	
90																	
100																	
110			C													D	
120																	
130																	

The above grid has dimensions of 170 feet x 130 feet = 22,100 square feet. The hypothesis is that the floor and the foundation for the proposed building had light-colored sands as a design feature within the red area bounded by Cells A, B, C, and D. The total space of the bounded area is 130 feet x 90 feet = 11,700 square feet. Note that Cells A, B, C, and D are of particular interest. Each of these cells have 100 square feet and the research hopes to differentiate these corner cells as having right angles on the cardinal points of the compass. The identification of these corners with inside light-colored sands would confirm that the design was done with forethought and with effort on the part of ancient people who lived in the area 2,000 years ago. In October 2015 Wayne May drove a ½" iron bar into the ground at the northeast corner of Cell B. At that same time Wayne found white sands inside Cell C and red soils outside on southwest and south of Cell C.

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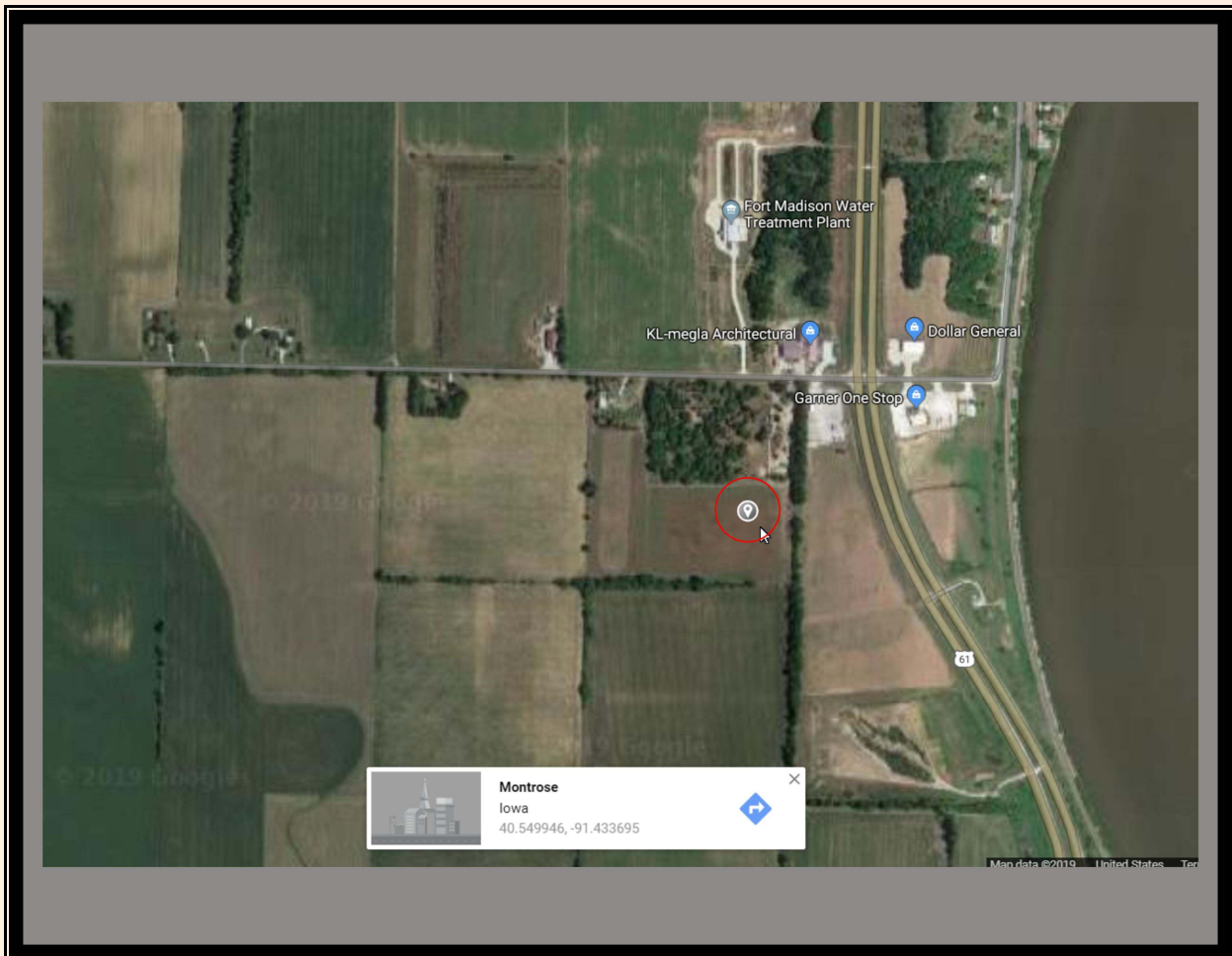


Figure 1 Position of 130 ft x 100 ft sand mound on Google Maps, GPS Position 40.549946, -91.433695. This is the spot where 12 soil core samples will be taken to determine the inside and outside perimeter of the oval or rectangular feature that is about 2,000 years old and is buried in the ground. The soil profile of the core boring should be about 2" in diameter going below the surface of the ground from 10 to 12 ft. The main focus is on the core drilling to measure the existence or non-existence of fine sand below the surface.

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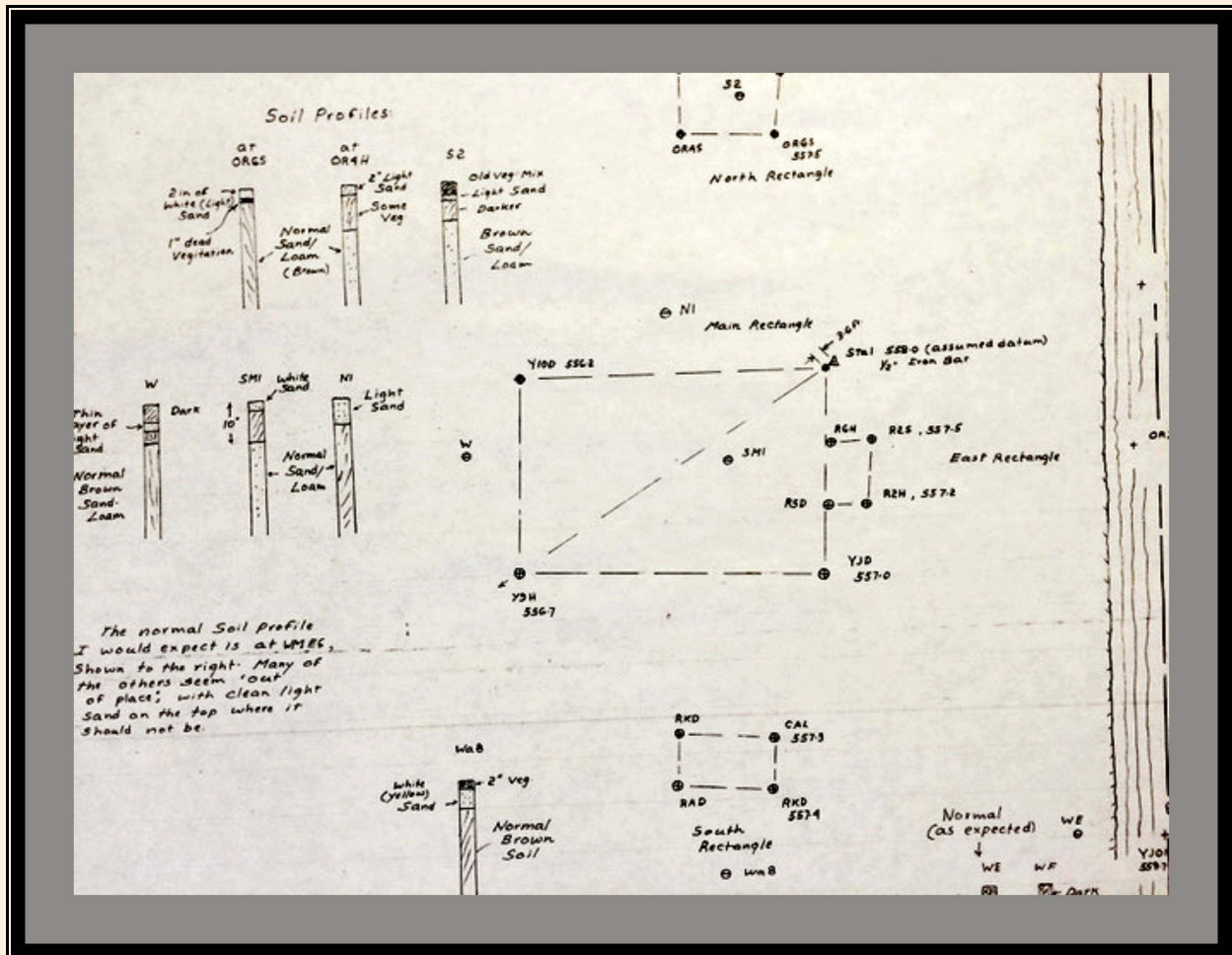


Figure 2 Dr. J. P. Scherz, Professor at University of Wisconsin at Madison, in October 2015 made field notes and surveys of sand mound in Montrose, Iowa. The rectangle in the survey is at GPS Coordinates 40.549946, -91.433695. Rick Osmon and Wayne assisted Dr. Scherz in making this survey. A formal survey will be prepared from these notes and Dr. Scherz will sign the survey to authenticate his field work.

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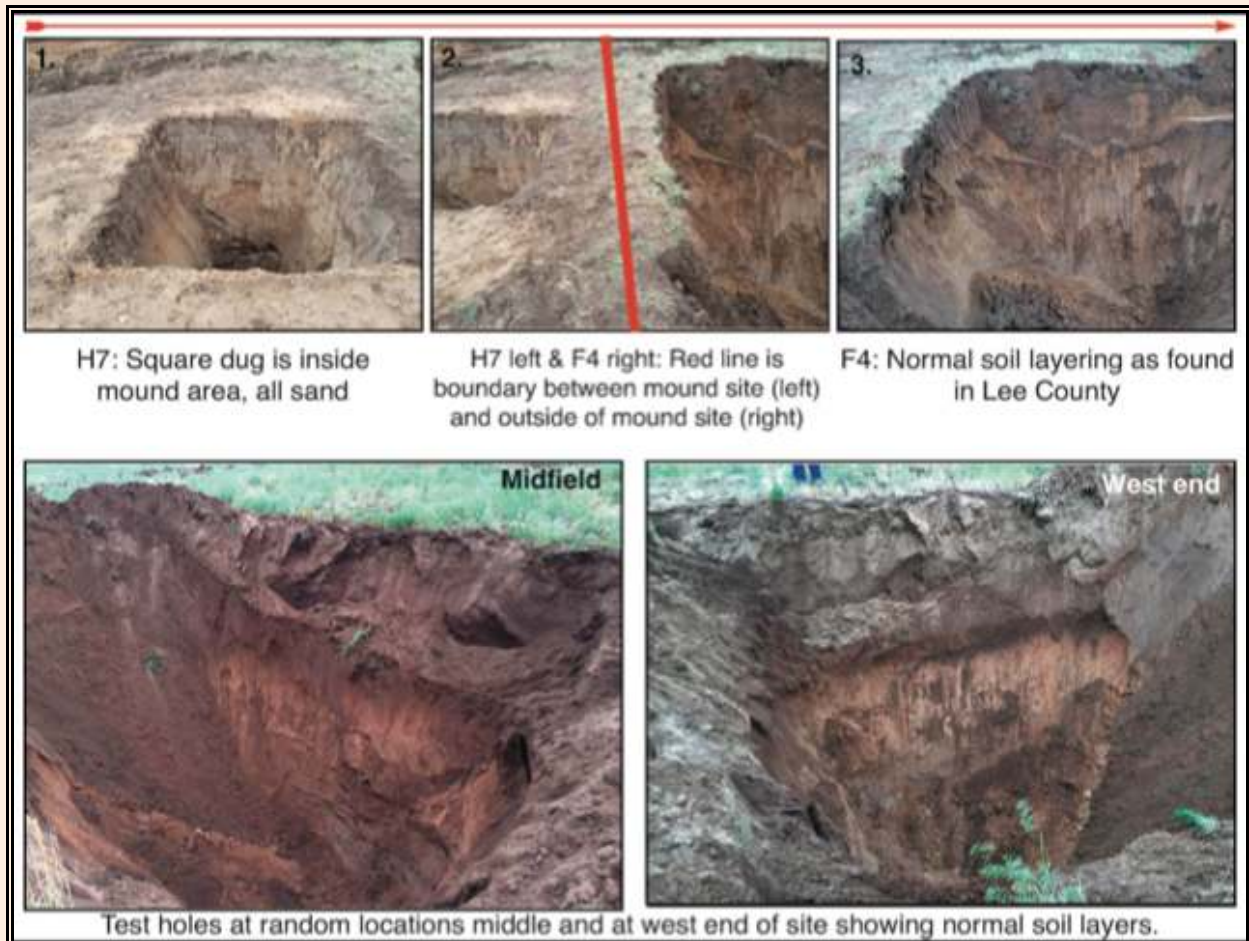


Figure 3 These photos contrast the sand inside the mound area with the soil layers found outside the mound. H7 left & F4 clearly identifies the boundary between the sand mound area and the outside soil layers. Wayne May took these photos in October 2015 at GPS Coordinates 40.549946, -91.433695.



Figure 4

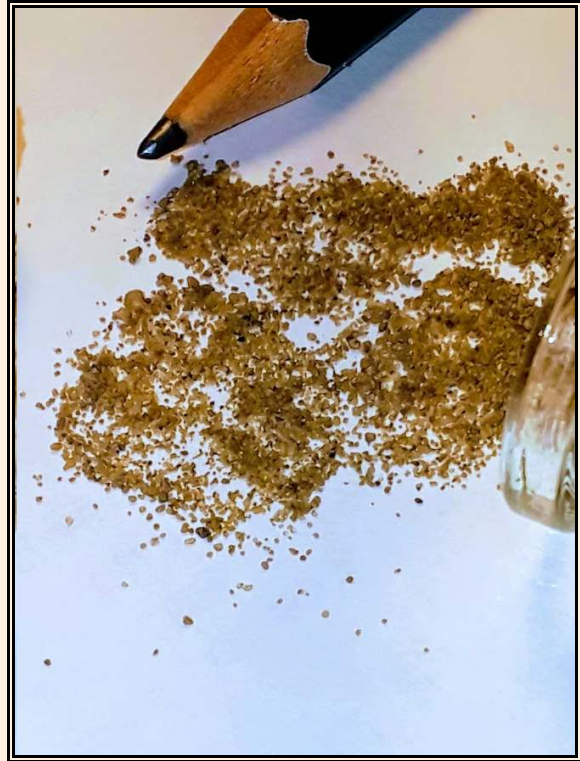


Figure 5



Figure 6



Figure 7

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Figure 8



Figure 9



Figure 10



Figure 11